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EXAMINER
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ABEL JALIL, NEVEEN

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2165

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### Remarks

1. In response to Applicant's Amendment filed on October 3, 2007, claims 1, 3-11, 25-31, 36-42, and 62-64 are pending in the application.
2. Applicant's response has overcome the previous claim rejections under 112, second.
3. Applicant's remarks and amendment to the claims changes the scope and focus of the invention from what appeared to be "preparation" and generation of documents corpus once extracted and compiled then matched to previously unknown user query (i.e. no knowledge of what the query will be) to query focused knowledge wherein the extraction and generation is solely based on the content of the retrieved results to the query. Hence necessitating the new ground(s) of rejection below.

### *Information Disclosure Statement*

4. The information disclosure statement (IDS) submitted on May 7, 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-5, 7, 11, 25-28, 31, 36, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Mikheev (U.S. Pub. No. 2002/0055919 A1).

As to claim 1, Mikheev discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See page 1, paragraph 0006, wherein it is inherent that a query is formed using query language);

using at least a portion of the user query to search for and retrieve a set of one or more documents (See Figure 4, wherein keyword search was conducted and results presented accordingly, also see page 1, paragraph 0006);

extracting from the retrieved set of one or more documents, at least one concept feature that appears in at least one document in the retrieved set of one or more documents (See Figure 3, 40, 42, and see page 1, paragraph 0007, wherein “concept feature” is read on “phrase” read in light of Applicant’s specification paragraph 0044);

using the at least one concept feature to determine, using a knowledge map, at least one matched concept that corresponds to the at least one concept feature (See page 2, paragraph 0039, also see Figure 3, 50, wherein “informational map” reads on “knowledge map”, wherein “concept feature” is read on “phrase” read in light of Applicant’s specification paragraph 0044);  
and

presenting to the end-user at least one indication of the at least one matched concept and at least one document associated with the at least one matched concept (See Figure 7, shows concept maps with matched documents, and see page 2, paragraph 0036, wherein “visually displaying the connected nodes and links on a user interface” reads on “an indication”).

As to claim 3, Mikheev discloses further including:

presenting to the user at least one indication of at least one related concept to the at least one matched concept ((See page 5, paragraph 0062, wherein “displaying the connected nodes and links on a user interface” reads on “an indication”, and wherein “related concept” reads on “additional concept” linked to the “matched concept”);

receiving from the user a selection of at least one related concept (See page 5, paragraph 0062, See Figure 20, all concept selections are linked on the map and displayed to the user); and

presenting to the user at least one indication of at least one document associated with the user-selected related concept (See page 4, paragraph 0059, wherein “displaying the connected nodes and links on a user interface” reads on “an indication”, and wherein “related concept” reads on “additional concept” linked to the “matched concept”).

As to claims 4, 26, and 27, Mikheev discloses in which the presenting to the user at least one indication of at least one document associated with the user-selected related concept includes presenting to the user the at least one indication of the at least one document associated with both the user-selected related concept and the at least one matched concept (See page 5, paragraph 0062, also see Figure 23, wherein “displaying the connected nodes and links on a user interface”

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reads on “an indication”, and wherein all concepts are ranked and associated with documents).

As to claim 5, Mikheev discloses further including presenting to the user at least one indication of the at least one matched concept (See corresponding rejection in claim 1 above).

As to claims 7, and 28, Mikheev discloses further including ranking related concepts (See page 5, paragraph 0063, wherein “ranked” reads on “most relevant”, wherein if matched concepts themselves are ranked, it is inherent that any other concepts can be ranked too, wherein “related concepts” are read on “additional concepts” from the refined search).

As to claim 11, Mikheev discloses a computer-readable medium for performing the method of claim 1 (See claim 1 rejection above).

As to claim 25, Mikheev discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See corresponding rejection in claim 1 above);

searching for and retrieving a set of one or more documents by determining whether at least one feature in the user query language substantially matches at least concept feature associated with at least one concept in a plurality of concepts in a knowledge map that are pregrouped into a plurality of groups, each concept including as evidence at least one concept feature (See page 2, paragraph 0039, also see Figure 3, 50, wherein “informational map” reads

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on “knowledge map”, wherein “concept feature” is read on “phrase” read in light of Applicant’s specification paragraph 0044, wherein “pregrouped” reads on “clusters”);

extracting from the retrieved set of one or more documents, at least one concept feature that appears in at least one document in the retrieved set of one or more documents (See corresponding rejection in claim 1 above);

using the at least one concept feature to determine at least one matched concept that corresponds to the at least one concept feature (See corresponding rejection in claim 1 above);

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept, wherein the at least one concept feature is obtained from the set of one or more documents, at least one indication of the at least one matched concept and at least one related concept to the at least one matched concept, the at least one related concept determined from a predefined correspondence relationship between the at least one matched concept and the at least one related concept, the indication of the at least one related concept presented as corresponding to the at least one matched concept to which it is related (See page 2, paragraph 0037, wherein “predefined relationship” reads on “similar subject matter grouped together”, and see page 5, paragraph 0066); and

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with the at least one concept, at least one indication of the at least one matched concept and at least one document associated with the at least one matched concept, the at least one document drawn from a plurality of documents that are respectively linked to one or more of the concepts in the knowledge map (See

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Figure 22, also see page 5, paragraph 0062, wherein “concept feature” is read on “phrase” read in light of Applicant’s specification paragraph 0044).

As to claim 31, Mikheev discloses a computer-readable medium for performing the method of claim 25 (See claim 25 rejection).

As to claim 36, Mikheev discloses a method of steering a user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See corresponding rejection in claim 1 above);

searching and retrieving a set of one or more documents determining whether at least one feature in the user query language substantially matches at least one concept feature associated with a concept in a plurality of concepts in a knowledge map that are pre-grouped into a plurality of primary groups, each concept including as evidence at least one concept feature that is also in at least one document in a plurality of documents that are tagged to one or more of the concepts in the knowledge map, wherein the at least one concept feature is extracted from the retrieved set of one or more documents (See corresponding rejection in claim 25 above);

presenting to the end-user, when the at least one feature in the user query language substantially matches the at least one concept feature associated with the concept (See rejections in claim 1, and 25 above):

at least one indication of the at least one matched concept (See corresponding rejection in claim 2 above);



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at least one indication of at least one related concept to the at least one matched concept  
(See corresponding rejection in claim 2 above); and

at least one indication of at least one document associated with the at least one matched  
concept (See corresponding rejection in claim 2 above).

As to claim 42, Mikheev discloses a computer-readable medium for performing the  
method of claim 36 (See claim 36 rejection above).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in  
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are  
such that the subject matter as a whole would have been obvious at the time the invention was made to a person  
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the  
manner in which the invention was made.

8. Claims 6, 8, 9-10, 29-30, and 62-64 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over Mikheev (U.S. Pub. No. 2002/0055919 A1) in view of Korda et al. (U.S.  
Patent No. 6,564,210 B1).

As to claim 6, Mikheev discloses the claimed invention and teaches relevance of concepts  
to query results but does not explicitly teach in which the presenting to the user at least one  
indication of the at least one matched concept and the presenting to the user at least one related  
concept to the at least one matched concept includes presenting to the user a paired indication of:

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(1) a matched concept, and (2) a corresponding related concept.

Korda et al. teaches in which the presenting to the user at least one indication of the at least one matched concept and the presenting to the user at least one related concept to the at least one matched concept includes presenting to the user a paired indication of: (1) a matched concept, and (2) a corresponding related concept (See column 7, lines 35-67, and see column 8, lines 1-27).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Mikheev with the teachings of Korda et al. to include presenting to the user at least one indication of the at least one matched concept and the presenting to the user at least one related concept to the at least one matched concept includes presenting to the user a paired indication of: (1) a matched concept, and (2) a corresponding related concept because it provides for more customized and easier presentation of search results.

As to claims 8, and 62, Mikheev does not explicitly teach in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indications of related concepts .

Korda et al. teaches in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indications of related concepts (See rejection for claim 6 above).

The motivation to combine is similar to claim 6 above.

As to claims 9, 29, and 63, Mikheev teaches the claimed invention but does not explicitly teaches in which the ranking related concepts includes ranking using a number of times that the related concept was previously-selected by at least one end-user.

Korda et al. teaches in which the ranking related concepts includes ranking using a number of times that the related concept was previously-selected by at least one end-user (See column 9, lines 5-25, wherein “repeated searches” reads on “preciously selected”, and see column 10, lines 40-57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Mikheev with the teachings of Korda et al. to include ranking related concepts includes ranking using a number of times that the related concept was previously-selected by at least one end-user because it provides for improved ranking and better accuracy of search result retrieval.

As to claims 10, 30, and 64, Mikheev as modified teaches including promoting a related concept in the ranking when a previous selection by an end-user resulted in an inferred success in returning at least one relevant document (See Korda et al. column 9, lines 5-25, wherein “implicit” reads on “inferred”).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 37-41 are rejected under 35 U.S.C. 103(a) as being obvious over Mikheev (U.S. Pub. No. 2002/0055919 A1).

As to claim 37, Mikheev discloses the claimed invention but does not explicitly recite in which the related concept is obtained from a derived group mapping relationships between primary group concept nodes from the same or different primary groups. Mikheev teaches clusters, sub clusters, and related clusters with additional mapping.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to assign different headings to primary concept groups since it is known in the database art that concept groups are user definable (non-functional descriptive material does not add functionality to the claim and any type of content can be stored and defined in a knowledge bases) (*see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).).

As to claim 38, Mikheev as modified teaches in which the primary groups or derived groups including an Activities group, a Symptoms group, a Products group, and an Objects group (See corresponding rejection for claim 37 above) Specific to the claim language of:

further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

an Activities and Objects group, including at least one relationship between an Activities concept and an Objects concept;

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an Activities and Products group, including at least one relationship between an Activities concept and a Products concept;

a Symptoms and Objects group, including at least one relationship between a Symptoms concept and an Objects concept;

a Symptoms and Products group, including at least one relationship between a Symptoms concept and a Products concept; and

a Symptoms and Activities group, including at least one relationship between a Symptoms concept and an Activities concept.

As to claim 39, is rejected under the same rationale as claim 38 wherein Mikheev as modified teaches:

further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of**:

an Activities and Activities group, including at least one relationship between different Activities concepts;

an Objects and Objects group, including at least one relationship between different Objects concepts;

a Symptoms and Symptoms group, including at least one relationship between different Symptoms concepts; and

a Products and Products group, including at least one relationship between different Products concepts.

As to claim 40, Mikheev as modified discloses further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of:**  
at least one lexically-similar group, including at least one relationship between lexically similar concepts; and  
at least one semantically-similar group, including at least one relationship between semantically similar concepts.

As to claim 41, is rejected under the same rationale as claim 36 wherein Mikheev as modified teaches the primary groups consist only of Products, Activities, Symptoms, and Objects groups.

The motivation to include such teachings is the same as motivation for claim 36.

#### *Response to Arguments*

11. Applicant's arguments with respect to claims 1, 3-11, 25-31, 36-42, and 62-64 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilcox et al. (U.S. Pub. No. 2002/0049792 A1) teaches conceptual content delivery.

Kato et al. (U.S. Pub. No. 2002/0120451 A1) teaches extracting features from retrieved results.

Szabo (U.S. Patent No. 6,868,525 B1) teaches visualization of concept hierarchy.

Alonso et al. (U.S. Patent No. 7,092,936 B1) teaches search and recommendation based on usage.

Paik et al. (U.S. Patent No. 6,263,335 B1) teaches information extraction using concept relationships.

Nomoto et al. (EP 0822503 A1) teaches linguistic features extracted from the query are classified into Concepts expressing content of the query.

Gallivan et al. (U.S. Patent No. 6,978,274 B1) teaches extracting features from unstructured document and normalizing them into concepts.

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Fratkina et al. (U.S. Pub. No. 2005/0055321 A1) teaches multi-step dialog with user and assigning concept classification.

Perro et al. (U.S. Pub. No. 2002/0152202 A1) teaches extracting keywords from query results.

Adler et al. (U.S. Pub. No. 2003/0033295 A1) teaches filter query results and build thesaurus.

For complete list of cited relevant prior art, see PTO-Form 892.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

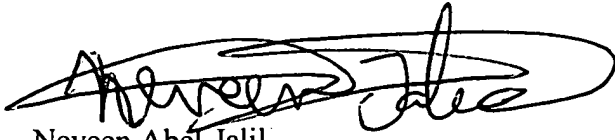
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A handwritten signature in black ink, appearing to read "Neeven Jalil", enclosed within a large, horizontal oval scribble.

Neveen Abel-Jalil  
Primary Examiner  
January 1, 2007